

## ABSTRACT

5 A neuroprotective composition for protecting neuronal cells against oxidative stress and methods for using and preparing the same. More particularly, the neuroprotective composition of the invention comprises a mixture of pyruvate, antioxidant, and lipid(s) such as fatty acids. The neuroprotective composition could be used for the treatment of brain trauma, brain or cerebrovascular ischemia, neurodegenerative diseases, poisoning of neuronal cells, the  
10 diminution of drugs side effects and for preservation of neuronal grafts.